

Abstract of the Disclosure

A vehicular generator-motor 1 is composed of a rotor, a stator having three phase armature winding 2, and a converter 4. The 5 rotor is provided with a field winding 3 for magnetizing a plurality of magnetic pole pieces 14a, 15a, and permanent magnets 17 for magnetizing the magnetic pole pieces 14a, 15a together with the field winding 3. When the generator-motor 1 is operated as a motor, the converter 4 is operated as an 10 inverter to restrain the armature current at the time of low speed rotation to the extent of the additional magnetic flux from the permanent magnets.